



## TELECOMMUNICATIONS MARKET SNAPSHOT: INDIA

### Key Statistics

Population	1,189,172,906 (July 2011 est.)
GDP	\$4.046 trillion (2010 est.)
Per capita GDP	\$3,400 (2010 est.)
Main lines	35.77 million (2010)
Teledensity	60% (2010)
Mobile subscribers	347 million (2008 est.)
Mobile penetration	30% (2008)
Internet users	61.338 million (2009)
Internet penetration	5% (2008)
Broadband subscribers	5.28 million (2008)
Spending on telecom equipment and services	\$34.48 billion (2010)
U.S. equipment exports to market	\$371 billion (2010 est.)

Sources: CIA World Factbook, USITC, and Worldwide Black Book

### Market Overview

#### Statistical Summary

With a population of more than one billion and a GDP around \$4.046 trillion (PPP), India is the world's second most populous country and the world's 5th largest economy. India has the world's 10th largest telecommunications network. Spending on telecom equipment may total about \$4 billion in 2011, while spending on telecom services is predicted to be around \$44 billion.

There are seven operators providing basic services, four national fixed-line and four international operators and 9 major cellular operators. Government-owned BSNL controls about 73.7% of the fixed-line market (with 26.219 million lines), while no mobile carrier has more than 30% of the total subscriber base. Mobile subscriber growth is running at around 52 million additions per quarter. As of September 2010, Bharti Airtel has the most subscribers (143.3 million), followed by Reliance (117.3 million), Vodafone Essar (115.6 million), BSNL (78.3million), and Tata Teleservices (79.1 million). The total number of mobile subscribers at the end of September 2010 was 687.7 million. India's teledensity has reached 60%.

India has only 10.29 million broadband connections and nearly 17 million Internet subscribers. The government had set ambitious targets for 2010: 20 million broadband and 40 million Internet subscribers.

#### Development of India's Telecommunications Sector

In 1991, India had 6.5 million telephone lines in service and a teledensity of about 0.75. The following year the government announced that value-added services would be opened to the private sector, and the "breezes of liberalization" began to stir. In 1994, the government announced a National Telecom Policy that set out a future vision and specific targets for accomplishment. The following year the Government announced tenders for the provision of basic and cellular services in India.

The immediate results of the new Telecom Policy, however, were disappointing. The initial tendering process did not move forward as planned. Some firms offered bids far in excess of marketplace realities; successful bidders struggled to raise the capital required; and the state-owned monopoly telecom carriers resisted efforts to introduce new competitive carriers into the marketplace. In addition, a separate telecom regulatory body was not established until 1997, and initially it proved to be an ineffective regulator without sufficient authority to assure a level playing field for the new carriers. For several years, despite its vast potential for development, India's telecom marketplace grew at a disappointingly slow rate, and some foreign telecom firms decided not to pursue investment opportunities in the sector.

The telecommunications sector in India began a transformation in earnest in 2002. Important policy modifications and greater regulatory assertiveness led to significant market liberalization. The introduction of competing wireless technologies and substantial investments by Indian telecom companies brought about an unprecedented growth in mobile communications that continues to this day. While some analysts believe that India is five years behind China in the development of telecommunications (China has about 850 million mobile subscribers to India's 687.7million), there is little doubt that India's rapid rate of growth in telecom will continue well into the future.

### **Government Agencies Involved in the IT and Telecommunications Sector**

**The Department of Telecommunications---** Formerly, the Department of Telecommunications (DoT) was the state-owned telecommunications entity that enjoyed a monopoly on all local and long distance telecommunications services throughout India. The DoT also formulated policy and, until the establishment of the Telecommunications Regulatory Authority of India (TRAI) in 1997, regulated India's telecom sector. Private companies received licenses to offer mobile and landline services in specific geographical areas known as "circles" in the late 1990s, and in August 2000, India's domestic long distance market was opened to competition. The domestic telephone operations of DoT were "corporatized" in October 2000 under a new moniker, Bharat Sanchar Nigam, Ltd. (BSNL), to move the organization toward business and financial disciplines that would reflect the new competitive environment in telecommunications in India.

The government still maintains 100 percent ownership of BSNL and holds a majority stake in MTNL. The third formerly government-controlled telecom carrier, Videsh Sanchar Nigam, Ltd. (VSNL), is now owned by the Tata Group, although the government has kept a 26 percent ownership stake in the company.

The DoT maintains its responsibility for the formulation of telecom policy and for issuing licenses to applicants to provide basic and value-added services. The DoT represents the government at international bodies such as the International Telecommunications Union (ITU), allocates radio frequencies for use by telecom providers, and promotes telecom research and development as well as private investment in the sector. Within the DoT is the **Telecom Commission** that exercises administrative and financial powers and is headed by a chairman, four full-time members from the DoT, and four part-time members from other departments of the government. The current chair of the Telecom Commission is Mr. D.S. Mathur. Overseeing the DoT is the Minister for Communications and Information Technology, Mr. Dayanidhi Maran, a member of Prime Minister Singh's cabinet.

**The Wireless Planning Coordination Committee (WPCC) ---**This group is responsible for management of the spectrum, assigning frequencies in line with the National Frequency Allocations Policy of 2002, and licensing wireless carriers. It also has a role in coordinating India's satellite networks and space communication program.

**The Telecommunications Regulatory Authority of India (TRAI) ---**For 50 years, the Department of Telecommunications was both the operator and the regulator of telecom services in India. In 1997, a telecom regulator was established by an act of Parliament. The TRAI Act gave the regulator a number of responsibilities, including recommending the terms and conditions of licenses to service providers; ensuring technical compatibility and effective interconnection among different service providers; regulating revenue sharing arrangements for service providers; protecting the interests of consumers; monitoring service quality; ensuring compliance with universal service obligations; and rendering advice to the government on telecommunications development.

The TRAI was restructured in 2000. Its membership was reduced, and the agency lost its adjudicatory powers. An amendment act sought to strengthen the regulatory framework and establish a clear distinction between the functions of TRAI as a maker of recommendations to the government on specific matters and as a regulator of the telecom sector. The Telecom Dispute Settlement and Appellate Tribunal (TDSAT) was created to adjudicate disputes between a licensor and licensee or between service providers, or complaints lodged by consumers, and to hear appeals against any decision or order of the TRAI.

TRAI's recommendations are binding in the areas of fixing tariffs, interconnectivity (technical issues and charges), and quality standards. TRAI's recommendations are not binding on the government in terms of licenses and revocation of licenses. Both TRAI's recommendations and the government responses are available as public documents, thus promoting increased transparency. TRAI's more recent recommendations on opening up segments of India's telecom market to competition have been accepted in full by the government, but the regulator still lacks the

authority to issue licenses. TRAI is composed of a chairman, currently Dr. J. S. Sarma, and not more than two full time and two part time members.

## **Major Telecom Players in the Indian Market**

*Bharat Sanchar Nigam, Ltd. (BSNL).* BSNL, formerly known as the Department of Telecommunications Services, was “corporatized” in October 2000, so it could operate as a stand-alone business entity rather than as governmental department. BSNL is India’s largest telecommunications company as well as the country’s largest public sector undertaking. The Government of India holds 100 percent ownership of BSNL. In August 2008, BSNL announced plans to sell a 5% to 10% stake to a private foreign company instead of an IPO.

BSNL provides a full range of telecommunications services throughout India except for the metropolitan areas of Delhi and Mumbai. It offers wireline local and domestic long distance telephone services. On the mobile front, BSNL offers GSM cellular mobile services as well as a local service provided through WLL systems.

With its resources, assurances of government support, ability to finance its capital investments, and its extensive network infrastructure, BSNL should remain India’s dominant telecom carrier for some time to come. There has long been speculation that BSNL might be merged with the other government carrier, MTNL to form one carrier that would serve all of India.

*Mahanagar Nigam Telecom Ltd. (MTNL).* MTNL was taken out of the Department of Telecommunications and established as a separate entity in 1986 to provide telephone services in the Delhi and Bombay metropolitan areas. The company, in which the government holds a 56.25 percent ownership, now offers a wide variety of telecom services in India’s two biggest revenue markets.

MTNL is looking to increase its revenues and pursue new opportunities in international markets. It is part of a consortium that is providing telecom services in Nepal and also has a fixed-network license, a cellular license and a license to offer international services in Mauritius. MTNL is budding for a license in Malawi and looking at opportunities in Kenya, Sri Lanka and Myanmar.

*Videsh Sanchar Nigam Ltd. (VSNL).* VSNL was spun off of DoT and incorporated at the same time as MTNL (in 1986) and given the sole right to control international bandwidth and provide international telecommunications services. Its monopoly was to last until April 2004, but the government opened the international sector two years earlier and gave compensation to VSNL. The Indian Government maintained a majority stake in VSNL until 2002 when the Tata group became a strategic partner and later increased its share of ownership to 46 percent.

VSNL obtained a domestic long distance license in 2002 that was free of license fee obligations. It also has been pursuing telecom opportunities in foreign markets. It is part of a joint venture company that provides WLL services in Nepal. VSNL received an operator’s license from Sri Lanka in 2003 to provide international voice and data services. The company formed VSNL America to offer IP-Virtual Private Network solutions in the United States, particularly to companies that want to connect with their subsidiary operations in India.

*Bharti Tele-Ventures (Bharti).* The Bharti Group is India’s third biggest telecom group and was incorporated in 1995 when India’s telecom services market was opened to limited private sector competition. Bharti Teletel is India’s largest telephone manufacturer.

Bharti achieved a number of “firsts” in India’s recently opened telecom services market. The first was the first private operator to offer national long distance and international voice services; it was the first Indian private company to offer fixed line services. Bharti is the largest mobile service provider in India and provides mobile services in the four largest Indian cities (Delhi, Calcutta, Chennai and Mumbai) and has the largest service-area “footprint” that includes more than 90 percent of India’s total mobile subscribership and nearly 60 percent of the country’s population.

*Reliance Communications.* Reliance Communications is part of the Reliance Group, a private sector company that is India’s largest business house and one of the world’s largest energy and petrochemicals groups. Reliance entered India’s telecom market in 1995 when it obtained licenses to provide cellular services in 7 states. In 2001, Reliance Infocomm obtained basic (fixed) service licenses for 18 states. Today, Reliance offers a complete range of fixed and mobile telecom services, including data, value-added, and national and international services.

*Tata Group.* India’s Tata Group has business operations in 7 industry sectors including materials, engineering and chemicals. It has three major enterprises in telecommunications. In 2003, the company adopted the brand name of *Tata Indicom* for all the telecom services provided by the Tata Group. *Tata Telecom*, a joint-venture with Avaya, is an equipment vendor for call center and data networking solutions.

## **Telecom Trade Agreements**

WTO

India is a party to three World Trade Organization (WTO) agreements, one on value-added telecommunications services, one on basic telecommunications services, and one on information technology products, including many types of telecommunications equipment. While commitments in those WTO negotiations may have sent unfortunate signals to the international investment community, since then, India has taken steps domestically to liberalize its telecom services and equipment markets, but it has yet to revise its international obligations to reflect its current telecom regime.

India joined the United States and 39 other countries in March 1997 in concluding the Information Technology Agreement (ITA). The goal of the ITA was to eliminate all tariffs on most types of information technology products—including telecommunications equipment—by the year 2000. India, however, reduced those tariffs to zero only in 2005. Other duties and import taxes, however, often increase the effective duty rate to a higher level. The telecom industry in India has long advocated for lower tariff duties on imported telecom equipment, so that costs of constructing telecom networks in India can be reduced, and, accordingly services can be made available to consumers at more affordable rates.

India's Uruguay Round commitments on value-added services allowed 51 percent foreign investment in specified services such as electronic mail, voice mail, on-line information and data processing services, and enhanced facsimile services. In 1998, India made limited commitments in basic voice and data transmission services by reaffirming its then local service duopoly policy, limiting foreign investment to 25 percent, and specifying that cellular service could only be provided through GSM technology. India also took an MFN exemption for international accounting rates.

Because it was in the process of establishing its telecom regulatory body, India was unwilling to assume in full the pro-competitive regulatory principles set out in the WTO "Reference Paper." India wrote its own reference paper that left out key guarantees and protections. Despite these weak trade obligations, India's regulatory authority is taking steps to establish pro-competitive processes and safeguards that are vital for new entrants to the market.

### **Leading Service Providers**

Bharti Airtel  
[www.bharti.com/](http://www.bharti.com/)

BSNL  
[www.bsnl.co.in/](http://www.bsnl.co.in/)

MTNL  
[www.mtnl.net.in/](http://www.mtnl.net.in/)

Reliance Communications  
[www.rcom.co.in/](http://www.rcom.co.in/)

Tata Teleservices  
<http://www.tatateleservices.com/>

Vodafone Essar  
<http://www.vodafone.in/VSNL>

### **Contacts**

#### *Regulatory*

Department of Telecommunications (DoT)  
<http://www.dot.gov.in/>

Wireless Planning Coordination Committee (WPCC)  
<http://www.wpc.dot.gov.in/>

Telecommunications Regulatory Authority of India (TRAI)  
<http://www.trai.gov.in/Default.asp>

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